

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-017084  
(43)Date of publication of application : 18.01.2002

(51)Int.CI.

H02M 3/28

(21)Application number : 2000-196153  
(22)Date of filing : 29.06.2000

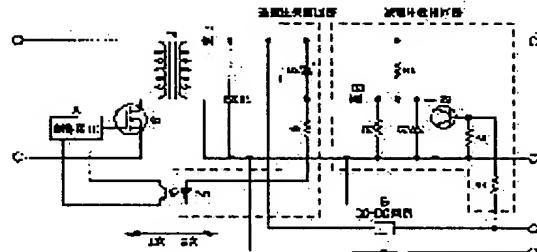
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## (54) SWITCHING POWER SUPPLY

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide size and cost reduction for a switching power supply by connecting an output interrupting circuit, without forming it in a separate circuit system, in a single circuit system on the secondary side.

**SOLUTION:** This switching power supply involves a rectifying/smoothing circuit, an overvoltage protective circuit, and a voltage drop detection circuit on the secondary side. The overvoltage protective circuit comprises a voltage regulating diode D2 and a diode of a photo-coupler PC1 connected with the anode side of the diode D2 through a resistor R5. The voltage drop detection circuit includes a first resistor R1 connected with the cathode side of the voltage regulating diode D2 of the overvoltage protective circuit, a rectifying diode D3 connected with the anode side thereof, and a second resistor R2 and a smoothing capacitor C2 connected with the anode side of the rectifier diode D3. The detection circuit is formed by connecting transistor Q2 whose collector and emitter are connected with the terminal of the smoothing capacitor C2 and a third resistor R3 and a forth resistor R4 connected with the base of the transistor Q2.



### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's

decision of rejection]

[Date of extinction of right]

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